

FOR HEALTH PROVIDERS

Medical Management of Children with Elevated Blood Lead Levels^{1 2}

The following guidelines are offered by the Washington State Department of Health to assist health care providers in caring for children with elevated blood lead levels. The set of questions provided on the next page may be useful in deciding whether a particular child is initially at a higher risk of exposure to lead. Also, on the next page are state contact names and numbers for more information.

BLOOD LEAD LEVELS (BLL)	ACTIONS
< 10 μg/dL	Indicates a normal blood lead level Retest child at physician's discretion or as parental concerns arise. Inform parents of potential lead hazards in child's environment.
10 – 14 μg/dL	Retest within 3 months These children are in a border zone. Adverse health effects will be subtle, if any, and are highly unlikely to be clinically apparent or measurable. Although it may not be possible to identify a specific source of lead, parents should be provided with family lead education. Continue retesting at 3 month intervals until the child's BLL has dropped below 10 μg/dL.
15 – 19 μg/dL	Retest within 2 months Despite a lack of clinical symptoms, these children may have an increased risk of small decreases in IQ and are more likely to have had exposure to a single, identifiable source of lead. Provide family lead education. Conduct a home interview and environmental investigation in conjunction with local health department. These children should be tested for iron deficiency and nutrition information should be provided. Provider emphasize need for retesting to make sure BLL is decreasing. Continue retesting at 2 – 3 month intervals until the child's BLL drops below 10 μg/dL.
20 – 44 μg/dL	Retest within 1 week to 1 month (the higher the BLL, the more urgent the need to retest) While clinical symptoms still may not be apparent, in the majority of children in this range, the potential for adverse health effects has been more clearly documented in health studies and there will usually be an identifiable source of lead in the child's environment. Perform a clinical evaluation - medical history, environmental and behavioral history, nutritional status, and physical examination. Perform a confirmatory lead test and iron deficiency test. A home interview and environmental investigation should be carried out in conjunction with the local health department. Other family members may also need to be tested. Continue retesting at regular intervals until the child's BLL drops below 10 μg/dL.
45 – 59 μg/dL	Retest within 48 hours Conduct a confirmatory venous test and full medical evaluation. Treat promptly with appropriate chelating agents and remove child from source of lead exposure. Provide family lead education. Conduct home interview and environmental investigation in conjunction with local health department.
60 – 69 μg/dL	Retest within 24 hours – venous / follow recommendations above
≥ 70 µg/dL	MEDICAL EMERGENCY – retest immediately as an emergency lab test Hospitalize the child and begin medical treatment immediately. Serious mental or nervous system damage can result. Begin coordination of care (case management), clinical management, environmental investigation, and lead-hazard control immediately.

¹ US DHHS: Screening Young Children for Lead Poisoning: Guidance for State and Local Public Health Officials, 1997.

² US DHHS: Preventing Lead Poisoning in Young Children: A Statement by the Centers for Disease Control and Prevention, 1991.

Follow-up testing

Children who are receiving clinical management should be tested at 1- to 2-month intervals until these three conditions are met:

- 1. The BLL has remained <15 μg/dL for at least 6 months, and
- 2. Lead hazards, e.g. chipping, peeling, lead-based paint, traditional remedies, etc., have been removed, and
- 3. There are no new exposures.

When these three conditions are met, children should be tested approximately every 3 months. Children for whom these three conditions are met who have reached 36 months of age no longer need to receive follow-up testing.

Washington State Lead Program Contacts

Department of Health

Lead Surveillance Program (800) 909-9898 toll free
Reporting and Case Follow-Up, Eric Ossiander (360) 236-4252
Environmental Health & Safety, Lew Kittle (360) 236-3381 or (888) 5TOXICS

Washington Poison Center (800) 732-6985 toll free

Department of Labor & Industries

Occupational Lead Exposure, Sharon Drozdowsky (360) 902-6573

Other lead information resources:

National Lead Information Center (800) 424-5323 toll free www.nlic.gov

Centers for Disease Control and Prevention
www.cdc.gov/nceh/programs/lead/lead.htm
US Environmental Protection Agency
(404) 639-2510
(800) 424-5323 toll free

US Environmental Protection Agency www.epa.gov/lead

US EPA Region 10 – Seattle www.epa.gov/r10earth/lead.htm